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| APPLICATION NO. FILING DAT | | LING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------|-----------------------|---------------|----------------------|---------------------|------------------|
| 10/648,157 | 10/648,157 08/26/2003 | | Masahiko Konno | TWA91USA | 3686 |
| 270 | 7590 | 06/15/2005 | | EXAM | INER |
| HOWSON A | · - | | CHARLES, MARCUS | | |
| ONE SPRING BOX 457 | 3 HOUSE | CORPORATION C | ART UNIT | PAPER NUMBER | |
| 321 NORRIS | TOWN R | OAD | | 3682 | |

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | Application No. | Applicant(s) | | | | |
|---|--|--|--|--|--|--|--|
| | | 10/648,157 | KONNO, MASAHIKO | | | | |
| | Office Action Summary | Examiner | Art Unit | | | | |
| | | Marcus Charles | 3682 | | | | |
| Period fo | The MAILING DATE of this communication app or Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| THE - External form - If the - If NC - Failur | ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | 6(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133). | | | | |
| Status | | | | | | | |
| 1)🖂 | Responsive to communication(s) filed on 26 Au | igust 2003. | | | | | |
| 2a) <u></u> □ | This action is FINAL . 2b)⊠ This | action is non-final. | | | | | |
| 3)[| | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Dispositi | on of Claims | | | | | | |
| 4)⊠ | Claim(s) 1-12 is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5)□ | 5) Claim(s) is/are allowed. | | | | | | |
| | Claim(s) <u>1-12</u> is/are rejected. | | | | | | |
| | | | | | | | |
| 8)□ | Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Applicati | on Papers | | | | | | |
| 9)[| The specification is objected to by the Examiner | | • | | | | |
| 10)☑ The drawing(s) filed on <u>26 August 2003</u> is/are: a)☑ accepted or b)☐ objected to by the Examiner. | | | | | | | |
| | Applicant may not request that any objection to the d | rawing(s) be held in abeyance. See | 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11)[| The oath or declaration is objected to by the Exa | aminer. Note the attached Office | Action or form PTO-152. | | | | |
| Priority u | ınder 35 U.S.C. § 119 | | | | | | |
| 12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of: | | | | | | | |
| ,- | 1. ☐ Certified copies of the priority documents have been received. | | | | | | |
| | 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| | 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| | application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | |
| | | | | | | | |
| Attachment | • • | ,, — | | | | | |
| | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) | 4) Interview Summary (Paper No(s)/Mail Dat | | | | | |
| 3) 🔲 Infom | nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date 8/27/03, 3/03/04 &. 3/24/05 | | ttent Application (PTO-152) | | | | |

HC

6DETAILED ACTION

This is the first action relating to serial application number 10/648,157, filed 08-26-2003.

Claims 1-12 are currently pending.

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The examiner has accepted the drawing filed with this application as formal drawing.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 3-5, 7-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR(2736123) to Loeffler in view of Inoue et al (6,890,277). FR(2736123) discloses a guide for an endless flexible transmission medium, the guide comprising an elongated slide rail (30) having a surface along which the endless flexible transmission medium can travel, an elongated rail support (14) extended along the elongated direction, for supporting the slide rail; the slide rail and rail support are integrally molded from a high strength first polymer to form a guide for guiding the endless flexible transmission medium. FR(2736123) further discloses the outer surfaces

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of the slide rail and the rail support are entirely covered by a wear resistance second polymer material. FR(2736123) fails to disclose the guide is sandwich molded and the cover material is a polyamide resin. Inoue et al. disclose a guide with a supporting rail and a slide rail that are joined by sandwich molding process such that the slide rail material is of a polyamide resin in order to resist destruction at high temperatures and provide adequate strength and to be able to carry out the manufacturing process in a single mold without using complex mold or multi-step manufacturing process in addition, the polyamide resin resist frictional wear and heat. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to manufacture the guide of FR(2736123) by sandwich molding process in view of Inoue et al. in order to resist destruction at high temperatures and provide adequate strength and to be able to carry out the manufacturing process in a single mold without using complex mold or multi-step manufacturing process and to use polyamide resin as the cover material in order to reduce frictional wear.

In claims 3-5, 7-9 and 11-12, FR(2736123) fails to disclose the material of the slide rail and support rail are made from a first and second polymer resin material. Inoue et al. discloses the slide rail and the support support rail are made from polymide 46 resin (nylon 46), polyamide resin 66 (nylon 66), polyamid 6 (nylon 6) and resin aromatic polymide resin (aromatic nylon) in order to provide higher strength. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the rail of FR(2736123) so that it is made of the polymeric resin disclose by Inoue et al. in order to in order to provide higher strength.

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5. Claims 2, 6, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over FR(2736123) in view of Inoue et al. as applied to claim 1 above, and further in view of Nomura et al. (6,623,838). FR(2736123) and Inoue et al. disclose the claimed invention including the nylon 66 being reinforced with fiber in combination with fiber but does not disclose the fiber is glass fiber. Nomura et al. discloses that is known to reinforce polyamide resin (nylon 66) with 66 with glass fiber in order to increase strength without increase weight. Therefore, it would have been obvious to on of ordinary skill in the art at the time of the invention to modify the device of FR(2736123) and Inoue et al. so as to include poylamide resin 66 reinforced with glass fiber as disclosed by Nomura et al. in order to increase strength without increase weight.

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Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Soto et al. (5,318,482), Ullein (6,482,116), Ullein et al (6,599,209) and JP (10-213192) disclose a tensioner with a slide rail mad of a polymeric material.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcus Charles whose telephone number is (757) 272-

7101. The examiner can normally be reached on Monday-Thursday 7:30 am to 6:00

pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bucci can be reached on (571) 272-7099. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marcus Charles
Primary Examiner
Art Unit 3682
June 09, 2005